

gaming establishment, it is also possible that many items in this system can be taken or adopted from an existing gaming system. For example, gaming system 50 could represent an existing cashless gaming system to which one or more of the inventive components or controller arrangements are added, such as controllers, storage media, and/or other components that may be associated with a dynamic display system adapted for use across multiple gaming machines and devices. In addition to new hardware, new functionality via new software, modules, updates or otherwise can be provided to an existing database 70, specialized server 61 and/or general-purpose server 60, as desired. Other modifications to an existing system may also be necessary, as might be readily appreciated.

#### Reel Symbol Resizing

[0053] As noted above, a typical reel-based gaming machine includes a plurality of reels that are each divided into numerous reel stops or symbol segments. Each of these reel stops are typically the same size, with one reel symbol per reel stop or symbol segment. Where the reel has empty reel stops (i.e., blanks or ghosts), the blank segments are the same size as the segments having actual reel symbols. For example, where a given reel strip might have 17 reel stops, with 10 of the reel stops having actual visibly apparent reel symbols, there would then be 7 different “blanks” or ghost regions having large amounts of blank or empty space. Overall, the 17 reel stops along the reel would be evenly spaced and of the same size. Of course, reels having a different number of reel stops and/or a different percentage of reel stops that are blanks can also be used.

[0054] Turning now to FIGS. 3A and 3B, two different examples of adjacent rotating reels adapted for use in a gaming machine are presented. As will be readily appreciated, such adjacent rotating reels can be actual physical mechanical reels, such as the three adjacent reels presented in FIG. 3A, or they can be virtual reels emulated on the display of a processor based gaming machine, such as the five adjacent reels shown in the screenshot of FIG. 3B. It will be readily appreciated that many of the items and features involved in the presentation of such gaming reels are common to both physical mechanical reels and virtual simulated reels, such that the various exemplary items and features of both types of reels described herein can apply similarly to the other type of reel. For example, while the three reels of FIG. 3A are described here as physical mechanical reels, they might also be virtual (i.e., simulated mechanical) reels that could be shown on a video display 26 of processor-based gaming machine 10. In the event that a video display is not used, then item 26 of FIG. 3A can alternatively be a silk-screened glass or other display component having a viewing window 90 through which the reels are seen.

[0055] As shown in FIG. 3A, gaming reels 91a, 91b and 91c are adapted to rotate about a common axis 92, such as during game play. Each wheel has a plurality of reel stops 93, each of which contains one visible reel symbol 94 or only empty space comprising a “ghost” or “blank” 95. Each visible reel symbol 94 or blank 95 is generally contained within its own reel stop 93. Visible reel symbols 94 can include bars, fruits, coins, or barrels, as shown, and/or may also include a vast variety of other symbols suitable for use in a reel game, as will be readily appreciated. A viewing window 90 is adapted such that reels 91a, 91b and 91c can be seen therethrough, and it will be understood that such a viewing window can be used on

gaming machines that include mechanical reels and on those that include virtual reels on a video display. As can be seen, viewing window is adapted such that only some of the reel stops 93 may be seen, while others are hidden from view. For example, reel 91c has reel stops 93 containing a blank, a coin and a barrel that can be seen, and also reel stops containing a cherry and a bar that cannot be seen at the same time through viewing window 90. As shown, reels 91a, 91b and 91c are stopped such that a barrel, a bar and a coin are the visible reel symbols on the reel stops that have stopped across a center payline visible at the center of viewing window 90.

[0056] Although FIG. 3B depicts five adjacent virtual reels 91, there are many similarities with the mechanical reels of FIG. 3A. For example, each of the five virtual reels is visible through a viewing window 90, and various visible reel symbols from the reel stops of virtual reels 91 can be seen through the viewing window, while others cannot be seen therethrough at the same time. Reel symbols include cherries, watermelons, plums, oranges, other fruits and various numeral “7”s of different colors and designations, as well as “wild” symbols. Of course, many other specific reel symbols may also be used in addition to or instead of the examples that are illustrated. Unlike the three-reel example of FIG. 3A, the five-reel example of FIG. 3B does not include any reel stops that comprise ghosts or blank regions. As such, some of the embodiments of the present invention involving blank reel stops may not be as well suited for the exemplary gaming reels depicted in FIG. 3B, although other embodiments involving the highlighting of reel symbols regardless of blanks may be applicable. In general, many gaming reels, such as those shown in FIGS. 3A and 3B are configured such that three reel stops are in full view through the applicable viewing window. It will be understood, however, that other embodiments might be used that result in more or fewer reel stops per reel being visible at any given time, such as via different sizes in reel stops and/or the viewing window.

[0057] In particular, some embodiments of the present invention relate to the reduction of blank areas on gaming reels having blanks or ghosts. This can be done by stretching or otherwise sizing or resizing visible reel symbols so that they extend into those reel stops that contain ghosts or blank areas. Some embodiments relate to the sizing or resizing of visible reel symbols regardless of blanks, such that one or more visible reel symbols can be highlighted, such as by being oversized. Such reel symbol sizing can be done via a specialized reel configurator, as set forth herein. Referring to FIG. 4, various components of an exemplary processor-based gaming machine adapted to resize reel symbols according to one embodiment of the present invention are illustrated in block diagram format. Processor-based gaming machine 100 contains many components that can be similar or identical to those set forth in gaming machine 10 above. For example, display(s) 126, speakers 132, input devices 121 and currency acceptor 123, as well as other peripheral devices 128, can correspond to similar items in gaming machine 10. One or more sound cards 143 can aid to drive speakers 132, and one or more video cards or controllers 144 can be used to drive display(s) 126, which display(s) are preferably adapted to present one or more gaming reels 191.

[0058] As noted above, a master gaming controller 140 adapted to execute or control one or more aspects of wager based games is in communication with various other gaming machine components, either directly or via other components. For example, while master gaming controller 140